AUTHORS: Danilova, V. I., Gol'tsev, V. D., Prilezhayeva, N. A. SOV/48-22-9-11/40

TITLE: Spectroscopical Investigations of the Intermolecular and Intramolecular Interaction of the Nitro- and Amino Groups in Some Benzene Derivatives (Spektral'nyye issledovaniya mezhmolekulyarnogo i vnutrimolekulyarnogo vzaimodeystviya nitro- i aminogrupp v nekotorykh proizvodnykh benzola)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1958, Vol 22, Nr 9, pp 1054 - 1057 (USSR)

ABSTRACT: The presence of atom groups of opposite polarity in two different molecules leads, under certain conditions, to the formation of complexes. These complexes are bound together by electrostatic forces. In spectroscopical analyses a displacement of the absorption bands or even the formation of new bands can be observed in such cases. The authors carried out a comparative investigation of the interaction of the amino- and of the nitro group with the aniline- and nitro benzene molecules as examples. They also investigated these groups in nitro aniline. Accordingly the present paper consists of 2 sections:

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Spectroscopical Investigations of the Intermolecular and Intramolecular Interaction of the Nitro- and Amino Groups in Some Benzene Derivatives

SOV/48-22-9-11/40

a)Spectroscopical investigation of the system aniline-nitro-benzene and b)spectroscopical investigation of the nitro-aniline molecules. The investigations lead to the following conclusions: It has been shown that in the system aniline - nitrobenzene complex compounds of a 1:1 composition are forming. The stability of the binding in these complexes is about 0,6 kcal per mol. As a consequence of the complex formation the absorption maximum of benzene shifts from 3550 to 4300 Å. This shift is caused by a strengthening of the intermolecular binding during the excitation of the nitro-benzene molecule (Ref 6). The intramolecular binding between the groups NH_2 and NO_2 is strengthened in the molecules of the nitro-anilines at a transition from the para- to the meta- and ortho-isomer. The maximum of absorption shifts according to certain rules towards the longer waves. The displacement of the absorption maxima of the nitro-aniline isomers as well as in the system aniline-nitro benzene is caused by the stronger interaction

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Spectroscopical Investigations of the Intermolecular and Intramolecular Interaction of the Nitro- and Amino Groups in Some Benzene Derivatives

SOV/48-22-9-11/40

occurring at an excitation of the molecule. The sum of experience gained permits to assume that the nature of the inter- and intramolecular interaction is the same in the NH_2- and NO_2-groups. There are 3 figures, 3 tables, and 6 references, 2 of which are Soviet.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gos. universitete (Siberian Physical-Technical Institute at the Tomsk State University)

Card 3/3

24(7), 5(3)

AUTHOR: Danilova, V.I.

SOV/139-59-1-13/34

TITLE: On the Absorption Spectra of Nitrophenol Vapours and Solutions (K voprosu o spektrakh pogloshcheniya nitrofenolov v parakh i rastvorakh)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Fizika, 1959, Nr 1, pp 77-81 (USSR)

ABSTRACT: The author obtained the absorption spectra of nitrophenols in the vapour state and as solutions in dioxane, with the purpose of elucidating the nature of interaction of the NO_2 group with the groups NH_2 and OH. Three isomers of nitrophenol (ortho, meta, and para) were purified by recrystallization and their melting points were at 45, 96 and 114 °C. The experimental technique was the same as that described earlier (Ref 1). The results are given in Tables 1 and 2. Table 1 is a list of positions of λ_{max} of the first and second absorption bands of nitrophenol vapours. Table 2 gives the values of λ_{max} and K'_{max} of the three nitrophenol isomers in dioxane and hexane (the data on hexane were taken from Dede and Rosenberg's work, Ref 2). The author's and published data (Refs 2-6) on nitrophenols show that their properties are similar to

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those of nitroanilines (Ref 1). For example, we have in both substances the sequences $o_\lambda > m_\lambda > p_\lambda$ and $p_{K\nu} > o_{K\nu} > m_{K\nu}$, where o, m and p denote the values of λ_{max} and $K\nu_{max}$ of the ortho-, meta- and para-isomers respectively. Departure from additivity of the dipole moments follows the same sequence as $K\nu$ in nitroanilines and nitrophenols. Displacement of the first and second bands (Table 3) due to various solvents is the same in nitrophenols and in nitroanilines. The third band is practically unaffected by solvents; again this behaviour is common to nitrophenols and nitroanilines. Displacement of the absorption bands of meta- and para-isomers towards longer wavelengths when dissolved in water, alcohol or dioxane (Table 4) is due to formation of an intermolecular hydrogen bond. The absence of a displacement in the absorption spectrum of the ortho-isomer dissolved in dioxane, compared with the absorption spectrum in hexane (Tables 2 and 4), indicates the presence of an internal hydrogen bond. This agrees with the results deduced by Luttke and Mecke (Ref 7) from infrared spectra. The results obtained are interpreted

On the Absorption Spectra of Nitrophenol Vapours and Solutions

in terms of the dual nature of the NO_2 group which is a semi-polar compound with a quadrivalent positive atom of nitrogen and a negative atom of hydrogen. When a NH_2 group is close to a NO_2 group, electrostatic attraction between corresponding atoms is possible. Two effects appear in such a situation: an ortho-effect and an internal hydrogen bond. The ortho-effect consists of attraction of the positive nitrogen of the NO_2 group to the negative nitrogen of the NH_2 group, or to the oxygen of the OH group. The ortho-effect shows the acceptor nature of the NO_2 group. The donor properties of this group produce an internal molecular bond between atoms of the nitrophenol molecule. The ortho-effect and the internal molecular bond appear most clearly in the ortho-isomers. These effects are responsible for the physical and chemical properties of the ortho-isomer, such as its low melting point, poor solubility in polar

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solvents, low reactive power of some of the ortho-isomer atoms, etc.
There are 4 tables and 11 references, 2 of which are Soviet, 4 English, 4 German and 1 Japanese.

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S/058/61/000/007/018/086
A001/A101

AUTHORS: Danilova, V.I., Morozova, Yu.P.

TITLE: Effect of substitutes and solvents on electronic spectra of substituted of benzene

PERIODICAL: Referativnyy zhurnal, Fizika, no. 7, 1961, 135, abstract 7V261 ("Dokl. Mezhvuz. nauchn. konferentsii po spektroskopii i spektr. analizu", Tomsk, Tomskiy, un-t, 1960, 89 - 90)

TEXT: The authors had the purpose of revealing general regularities in the action of intra- and intermolecular interactions on the nature and properties of electronic spectra of molecules; with this aim they investigated the effect of substitutes and solvents on electronic absorption bands of a large group of substituted of benzene, aniline, and some other compounds (including di-, and triderivatives). It is shown that introduction into a molecule of a second substitute leads to various changes in spectra depending on its nature. The introduction of a third substitute is accompanied, as a rule, by simplification of the spectrum. Long wavelength band is the most sensitive to intra- and

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S/058/61/000/007/018/086
A001/A101

Effect of substitutes ...

intermolecular interactions. Oscillator strengths were determined for 22 substances in two solvents, and it is shown that a better agreement with the literature data and results of theoretical calculations is observed when internal field in the solution is taken into account by means of models of Lorentz and Onsager.

N. Bakhshiyev

[Abstracter's note: Complete translation]

Card 2/2

S/058/61/000/007/019/086
A001/A101

AUTHORS: Danilova, V.I., Shmakova, Z.A.

TITLE: On the nature of intra- and intermolecular interactions of NO_2, NH_2, and OH-groups in aromatic compounds

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1961, 135, abstract 7V266 ("Dokl. Mezhvuz. nauchn. konferentsii po spektroskopii i spektr. analizu", Tomsk, Tomskiy un-t, 1960, 90 - 91)

TEXT: Electronic and vibration absorption spectra of solutions of several substituted of benzene containing groups NO_2, NH_2 and OH are compared with Raman spectra of these compounds. It is shown that in view of specific features of the mentioned substituting groups, possessing both donor and acceptor properties, in the investigated molecules and solutions take place very complicated processes of intra- and intermolecular interactions, among which should be singled out the effects of conjugation, hydrogen bonds and associations. Characteristic spectroscopic marks are established indicating the presence, in every particular case, of one or another type of intra- and intermolecular interactions.
[Abstracter's note: Complete translation] N. Bakhshiyev

Card 1/1

S/139/60/000/03/044/045
E032/E314

AUTHOR: Danilova, V.I.

TITLE: Study of the Absorption Spectra of Solutions of Some Derivatives of Benzene in Dioxane

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1960, No 3, pp 237 - 238 (USSR)

ABSTRACT: A study was made of the absorption spectra of solutions of sixteen substances. The purity was checked by measuring the melting and boiling points. The substances investigated and the dioxane were purified by crystallisation from solution and distillation. The absorption spectra were measured on a quartz spectrophotometer of type SF-4. The position of the maxima of the absorption bands λ_{max} was determined to an accuracy of $\pm$ 10 Å. Absorption coefficients were calculated from the experimental data to an accuracy of $\pm$ 5% and the concentration of the investigated substances was 10^{-3} - 10^{-4} m/litre. The results obtained are shown in the table on p 238. It is clear from this table that for substances containing OH, NH_2 and COOH groups the spectrum of the solutions is

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S/139/60/000/03/044/045
E032/E314

Study of the Absorption Spectra of Solutions of Some Derivatives of Benzene in Dioxane

displaced towards longer wavelengths by not less than 90 Å as compared with water solutions. This displacement was observed for all the absorption bands. The absorption spectra of nitrobenzene and nitrodimethylanilines are found to be more affected by water than dioxane. The same was observed for nitroanilines and nitrophenols. The presence of the NO_2 group leads to a stronger displacement of the spectrum in water than in dioxane. In view of the fact that for some of the substances in dioxane all the absorption bands are displaced towards longer wavelengths, as compared with water solutions, it is concluded that the observed displacement is due not only to the formation of hydrogen bonds but also to the interaction of the dioxane with the benzene ring.
There are 3 Soviet references.

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S/139/60/000/03/044/045
E032/E314

Study of the Absorption Spectra of Solutions of Some Derivatives of Benzene in Dioxane

There is 1 table.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V. Kuybysheva
(Siberian Institute of Physics and Technology at Tomsk State University imeni V.V. Kuybyshev)

SUBMITTED: November 5, 1959

Card 3/3

DANILOVA, V.I.

Spectroscopic study of the effect of the medium on the reactive capacity of benzene substituted. Izv. vys. uchob. zav.; fiz no.6:66-73 '61. (MIRA 15:1)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.
(Chemical reactions)
(Benzene) (Spectrum analysis)

DANILOVA, V.I.; SHMAKOVA, Z.A.

Investigation of interaction processes between NO_2, OH, and NH_2 groups in aromatic compounds by the use of infrared absorption spectra. Izv.vys.ucheb.zav.;fiz. 2:91-97 '62. (MIRA 15:7)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.
(Aromatic compounds) (Absorption spectra)

DANILOVA, V.I.

Spectroscopic study of the effect of the medium on the reactivity of substituted benzenes. Part 3. Effect of aqueous solutions of chlorides and nitrogen-containing solvents on the electron absorption spectra of substituted benzenes. Izv.vys.uch.zav.; fiz. no.4:107-111 '62. (MIRA 15:9)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V. Kuybysheva.
(Benzene—Spectra) (Electrons)

DANILOVA, V.I.

On the origin of the long-wave absorption band in nitro amino compounds of the aromatic series. Izv. vys. ucheb. zav.; fiz. no.5:108-112 '62. (MIRA 15:12)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.
(Aromatic compounds—Spectra)

DANILOVA, V.I.

Spectroscopic study of the effect of the medium on the reactivity of substituted benzenes. Part 4: Absorption spectra of polysubstituted benzenes. Izv. vys. ucheb. zav.; fiz. no.5:113-120 '62. (MIRA 15:12)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.
(Spectroscopy)
(Benzene)

33637

S/051/62/012/001/002/020
E202/E492

5.5310 1153, 1282, 1273

AUTHORS: Danilova, V.I., Morozova, Yu.P.

TITLE: Measurement of oscillator strengths for the long-wavelength absorption band of certain substituted benzene derivatives

PERIODICAL: Optika i spektroskopiya, v.12, no.1, 1962, 12-16

TEXT: This work is the continuation of the earlier studies of the authors (Ref.1: Izv. vyssh. uchebn. zaved., fizika, 2, 1958, 108; Ref.2: Izv. vyssh. uchebn. zaved., fizika, 1, 1959, 77; Ref.3: Trans. High Schools Conf. on Spectroscopy and Spectra Analysis. Tomsk, 88, 1960) in which certain parts of the absorption spectra of mono and disubstituted benzene compounds containing, amongst others, NO_2, OH, NH_2 and COOH groups were interpreted with the help of the "metal model". In the present work, the influence of the solvents, substituents and the effects of interaction on the intensity of the long wavelength band was studied, by carrying out a systematic measurement of the oscillator strengths in 19 compounds using various solvents. The following were studied: phenol (water); aniline (hexane); nitrobenzene (hexane); benzoic acid (water); o-, m- and

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Measurement of oscillator ...

n-aminophenol (water); o-, m- and n-aminobenzoic acid (water and dioxan); o-, m- and n-dihydroxybenzene (dioxan); o-, m- and n-nitroaniline (water and hexane); o-, m-nitrophenol (water and hexane) and n-nitrophenol (water). The results of the total absorption and the calculation of oscillator strengths for each substance-solvent combination were given. The oscillator strengths values were quoted with and without the solvent corrections which were applied according to three models. The experimental error in the measurement of the oscillator strengths was of the order of a few percent. It was found that the best agreement with the literature and theoretical data was obtained when the oscillator strengths were evaluated taking into consideration the Lorentz-Onsager field. In the case of nitro-anilines, nitrophenols and amino-benzoic acids, changing the solvent from nonpolar to polar caused a 1.5 to 2-fold increase in oscillator strength. This was ascribed to a specific (not the universal) intramolecular interaction between the solvent and the solute. However, where the interaction between the solute molecules themselves was stronger than the solute-solvent inter-action, the change of solvent had no effect on the oscillator

strength. The latter case was exemplified by phenol and o-nitrophenol, where association and hydrogen coupling respectively were the preponderant mechanisms. Generally, the effect of the monosubstituted benzene derivatives in a single type of solvent was to reduce the oscillator strength in the following order: nitrobenzene > aniline > phenol > benzoic acid. The departure of the oscillator strengths values from the theoretical values may serve according to the authors as a qualitative indication of a specific interaction occurring when one solvent is substituted for another. These interactions may be due to the intrinsic nature of the group or to the isomerism or to some coupling effect. Generally, the position of the longwave band is determined in the first place by the direct "field" interaction of the groups, while its intensity is chiefly related to the coupling effect. T.P.Kravets, B.S.Neporent and N.G.Bakhshiyev are mentioned in the article in connection with their contributions in this field. Acknowledgments are expressed to I.V.Obreimov for supplying some of the data needed in the tests. There are 3 tables and 13 references: 10 Soviet-bloc and 3 non-Soviet-bloc. The

Measurement of oscillator ...

reference to an English language publication reads as follows:
Ref.9: I. Tanake, S. Nagakura. J. Chem. Phys., v.24, 1956, 1274.

SUBMITTED: January 10, 1961

Card 4/4

DANILOVA, V.I.; KOZHEVINA, L.I.; PONOMAREV, O.A.

Use of a metal model in calculating the energy levels and wave functions for carbonyl-containing substituted benzenes. Izv.vys.ucheb.zav.;fiz.no. 2:61-65 '63. (MIRA 16:5)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V. Kuybysheva.
(Nuclear models) (Wave mechanics) (Benzene—Spectra)

ZUBKOVA, L.B.; TERPUGOVA, A.F.; DANILOVA, V.I.

Use of the free-electron method in calculating the intramolecular interaction of nitro and amino groups in o-nitroaniline. Izv.vys. ucheb.zav.;fiz.no.2:85-91 '63.

(MIRA 16:5)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

(Molecules) (Aniline)
(Quantum theory)

MOROZOVA, Yu.P.; DANILOVA, V.I.

Role of the benzene ring and functional groups in the origin of the absorption bands in some nitro and amino compounds. Izv. vys. ucheb. zav.; fiz. no.5:64-67 '63. (MIRA 16:12)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

MOROZOVA, Yu.P.; DANILOVA, V.I.; TERPUGOVA, A.F.

Long-wave absorption bands in polysubstituted aromatic nitro compounds. Izv. vys. ucheb. zav.; fiz. no.1:164-167 '64.
(MIRA 17:3)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

DANILOVA, V.I.; ROLENKO, I.P.

Study of the absorption spectra of nitrocarboxyl-containing compounds of the aromatic series. Part 2. Izv. vys. ucheb. zav.; fiz. no. 3:29-34 '64. (MIRA 17:9)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

DANILOVA, V.I.; TERPUGOVA, A.F.

Interpretation of absorption bands in substituted benzenes. Izv. vys. ucheb. zav.; fiz. no. 3:62-71 '64. (MIRA 17:9)

1. Sibirskiy fizikc-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

DANILOVA, V.I.; PIOTNIKOV, V.G.

Nature of $n \rightarrow \pi^*$-transitions. Opt. i spektr. 17 no.4: 626-628 O '64. (MIRA 17:12)

L 2181-66 EWT(m)/EPF(c)/EWP(j)/EWA(c) RM

ACCESSION NR: AR5014387 UR/0058/65/000/004/D023/D023

SOURCE: Ref. zh. Fizika, Abs. 4D166

AUTHOR: Morozova, Yu. P.; Danilova, V. I.

TITLE: Investigation of absorption spectra of certain semi-converted benzols

CITED SOURCE: Sb. Spektroskopiya. M., Nauka, 1964, 167-169

TOPIC TAGS: absorption spectrum, organic solvent, solvent action, intramolecular mechanics

TRANSLATION: The following absorption spectra were measured: 2,4-dinitro-(I), 2,5-dinitro-(II), 2,6-dinitro-(III), 2,6-dichlor-(IV), 2,6-dibrom-(V) and 4-nitro-phenol-(VI), in water (VII), alcohol (VIII), hexane (IX) and benzol (X). I-III in non-polar solvents IX, X show bands at 3500 and 2500 Å, close to the nitrobenzol band, and in solvents VII, VIII a supplementary band near 4000 Å appears also. The spectrum change of I upon shifting from solvent VII to VIII is attributed to transformation of I into the quinoid form. It is estimated that up to 95% of I in VII appears in the benzol form, and that in VIII up to 97% in the quinoid form. We note the absence of isomerization in compounds III and IV; that in III is due to the intramolecular N-bond. R. Nurmuchametov.

Card 1/1 dg SUB CODE: OC, OP ENCL: 00

L 33191-66 EWT(1)/EWT(m)/EWP(j) LJP(c) RM
ACC NR: AR6016175 SOURCE CODE: UR/0058/65/000/011/D013/D013

AUTHOR: Danilova, V. I.; Zubkova, L. B.; Morozova, Yu. P.; Pnomareva, O. A.; Prilezhayeva, N. A.; Terpugova, A. F.; Filippova, L. G. Foronova, R. M.

41
B

TITLE: Influence of intra- and intermolecular interaction on the energy levels, electron spectrum, and color properties of complex molecules

SOURCE: Ref. zh. Fizika, Abs. 11D91

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 327-335

TOPIC TAGS: molecular interaction, complex molecule, electron energy level, electron spectrum, conjugate bond system, hydrogen bonding

ABSTRACT: The intramolecular interaction (effect of conjugation, external-field interaction between donor-acceptor groups, hydrogen bond, etc.) were investigated for molecules of di- and polysubstitutes of benzene (for 20 compounds). An interpretation of the observed phenomena is presented. Similar investigations were made for the intermolecular interaction in different solvents (for 20 systems) and for complex formation processes (10 systems). General laws of the influence of the indicated processes on the electron levels are formulated and the changes of the spectra are interpreted. [Translation of abstract]

SUB CODE: 20, 07

Card 1/1 nc

L 46564-66 EWT(m)/EWP(t)/T IJP(c) JD/JG/WW/RM

ACC NR: AR6016187 SOURCE CODE: UR/0058/65/000/011/D021/D021

AUTHOR: Danilova, V. I.; Ryzhova, G. L.; Morozova, Yu. P.; Terpugova, A. F.

TITLE: Investigation of long wave absorption bands of certain polysubstituted aromatic nitrocompounds

17
B

SOURCE: Ref. zh. Fizika, Abs. 11D153

REF SOURC: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 345-349

TOPIC TAGS: absorption band, aromatic nitro compound, organic solvent, BENZENE

ABSTRACT: The authors investigated the electron structures of absorption of certain polysubstitutes of benzene (para-nitrophenol, 2,4-, 2,5-, and 2,6-dinitrophenols, picric acid, para-nitrosophenol, and 2,4-dinitroaniline) for the purpose of determining the role of the NO_2 group in the origin of long-wave absorption bands. The energy levels of the 2,4- and 2,6-dinitrophenols are calculated by the free-electron method. It is shown that the hydrogen bond between the molecules of the investigated compounds and the molecules of the hydroxyl-containing solvents may lead to the occurrence of a new absorption band, which is missing from non-polar and oxygen-containing solvents. [Translation of abstract]

SUB CODE: 07

Card 1/1 JS

L 25378-65 EWA(k)/EWT(l)/EWP(m)/EWP(o)/EEC(c)-2/EWP(j)/EEC(b)-2/EWP(k)/EWA(m)-2/T
Pc-4/Pc-4/Pf-4/Pr-4/Pi-4/Pl-4 IJP(c)/RPL/ RWH/WG/JW/JUB/RM
ACCESSION NR: AP5003041 S/0051/65/018/001/0156/0158

AUTHOR: Plotnikov, V. G.; Danilova, V. I.

TITLE: Use of photodissociation processes and complex formation for production of level population inversion

SOURCE: Optika i spektroskopiya, v. 18, no. 1, 1965, 156-158

TOPIC TAGS: photodissociation, complex formation, phenol, aromatic acid, aromatic amine, nitrogen organic compound, frequency shift, absorption band

ABSTRACT: Following up the work by M. G. Kuz'min (DAN SSSR v. 151, 1371, 1963) and A. N. Oraevskiy (ZhETF v. 45, 371, 1963), who showed that population-level inversion can be attained in principle in photochemical and chemical reactions, and pointing out that there are no theoretical and few experimental data on the subject, the authors suggest a theoretical approach, based on simple examples in which they consider electrolytic dissociation of some phenols and aromatic acids, and also complex formation of aromatic amines and nitrogen compounds. An equation is derived for the ratio K^*/K of the equilibrium constants in the excited

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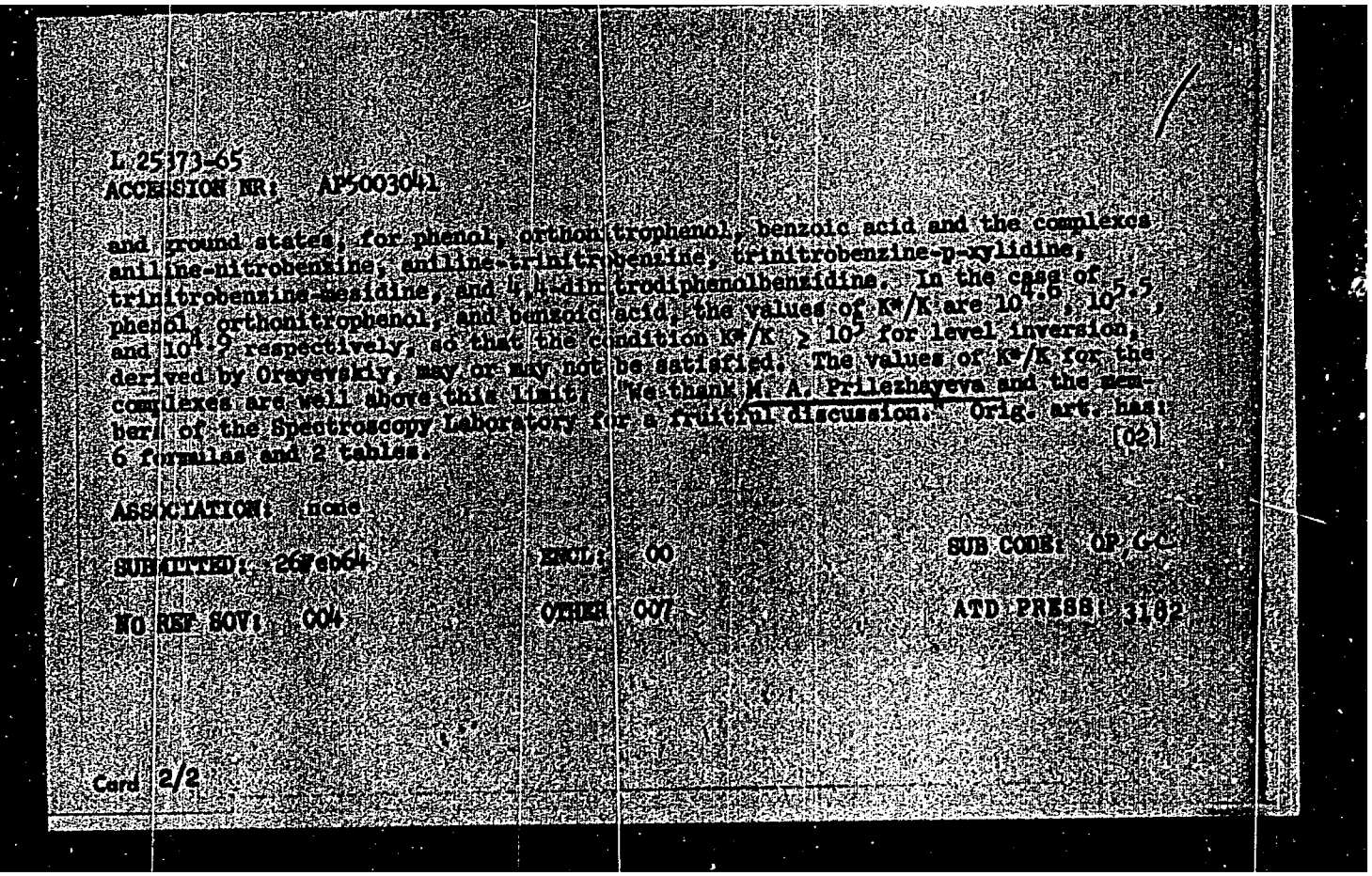


L 25173-65
ACCESSION NR: AP5003041

and ground states, for phenol, orthonitrophenol, benzoic acid and the complexes aniline-nitrobenzine, aniline-trinitrobenzine, trinitrobenzine-p-xylidine, trinitrobenzine-mesidine, and 1,3,5-dinitrodiphenolbenzidine. In the case of phenol, orthonitrophenol, and benzoic acid, the values of K^*/K are $10^{-4.6}$, $10^{-7.5}$, and $10^{-4.9}$, respectively, so that the condition $K^*/K \geq 10^2$ for level inversion, derived by Orgel-Mulliken, may or may not be satisfied. The values of K^*/K for the complexes are well above this limit. [We thank M. A. Prilezhayeva and the members of the Spectroscopy Laboratory for a fruitful discussion.] Orig. art. has: 6 formulas and 2 tables. [02]

ASSOCIATION: none

SUBMITTED: 26Feb64 ENCL: 00 SUB CODE: OP, GC

NO REF SOV: 004 OTHER: 007 ATD PRESS: 3182

Card 2/2

PLOTNIKOV, V.G.; DANILOVA, V.L.; SHIGORIN, D.N.; TERPUGOVA, A.F.; ZUBKOVA, L.B.; FILIPPOVA, L.G.

Theoretical study of the spectral behavior of systems with a quasi-aromatic cycle. Zhur. fiz. khim. 39 no.9:2311-2312 S '65. (MIRA 18:10)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

LAGUTSKAYA, L.I.; DANILOVA, V.I.

Method of Molecular Orbitals and Linear Combination of Molecular Orbitals for calculating the molecules containing two phenyl rings separated by a group of atoms. Repost 1. Zhur. strukt. khim. 6 no. 4:591-595 Jl-Ag '65 (MIRA 19:1)

1. Sibirskiy fiziko-tekhnicheskiy institut, g. Tomsk. Submitted May 4, 1964.

KUZNETSOV, A.V.; NIFASHEVA, I.F.; GAVRILOVA, L.A.; DANILOVA, V.M.

Frontal sections in the Arctic Basin and their relationship with the types of synoptic processes. Trudy AANII 255:192-212 '63. (MIRA 17:6)

NEKHOROSHEV, Aleksey Vasil'yevich; DANILOVA, V.M., red.; KUROCHKIN, D.K., tekhn.red.

[Local building materials] Mestnye stroitel'nye materialy. Ioshkar-Ola, Mariiskoe knizhnoe izd-vo, 1960. 103 p. (MIRA 14:4)

(Building materials)

DOLGIN, I.M., kand.geograf.nauk; NIKOLAYEVA, T.V., mladshiy nauchnyy sotrudnik; BASOVA, L.G., mladshiy nauchnyy sotrudnik; VORONTSOVA, L.I., mladshiy nauchnyy sotrudnik; DANILOVA, V.M., mladshiy nauchnyy sotrudnik; KOVROVA, A.M., mladshiy nauchnyy sotrudnik; SERGEYEVA, G.G., mladshiy nauchnyy sotrudnik; SMIRNOVA, V.N., mladshiy nauchnyy sotrudnik; KHARITONOVA, L.I., mladshiy nauchnyy sotrudnik; ALEKSANDROV, V.F., aerolog; KUZNETSOV, O.M., aerolog; MAYOROVA, L.A., aerolog; POSTNIKOVA, D.G., aerolog; SMIRNOVA, I.P., aerolog; VASIL'YEVA, R.P., tekhnik; MEDNIS, L.V., tekhnik; KHARITONOVA, V.A., tekhnik; KHRUSTALEVA, N.K., red.; DROZHZHINA, L.P., tekhn.red

[Aerological observations of Arctic stations during the period from June 30 through December 31, 1957] Aerologicheskie nabliudeniia poliarnykh stantsii s 30 iiunia po 31 dekabria 1957 g. Leningrad, Izd-vo "Morskoi transport," 1961. 994 p. (Arkticheskii i antarkticheskii nauchno-issledovatel'skii institut Trudy, vol.243)
(MIRA 14:11)

(Arctic regions--Meteorology--Observations)

DANILOVA, V.M.

Vertical extension of cyclones in the eastern sector of the Soviet Arctic. Trudy AANII 266:155-162 '64 (MIRA 18:1)

GAVRILOVA, L.A.; DANILOVA, V.M.; BUROVA, I.P.; SHIPOSH, N.V.

Structure of fronts at high latitudes. Meteor. i gidr. no.9: 64-71 '65. (MIRA 19:1)

USSR / Diseases of Farm Animals. Diseases Caused by Protozoa. R

Abs Jour : Ref Zhur - Biol., No 22, 1958, No 101350

Authors : Goncharov, I. Ye.; Danilova, V. M.; Zolotova, A. S.
Inst : Not given
Title : Using Vitamin B_{12} for Treating Anemia Caused by Theileriasis in Cattle.

Orig Pub : Veterinariya, 1958, No. 3, 34-38

Abstract : In experimentally treating 10 cows, vitamin B_{12} concentrates containing 80 γ of active substances per 1 ml. of concentrate were used. The preparation was subcutaneously injected into cows weighing 250 to 350 kilograms in 1 - 1.5 ml. doses in 4 - 5 ml. of water per each injection. The treatment proved successful, as was demonstrated by the resulting increase of the hemoglobin content in erythrocytes, by normalization of hemogenic processes, and,

Card 1/2

1. Dagestanskiy sel'skokhozyzystvennyy institut.
(Vitamins--B) (Anemia) (Theileriasis)

USSR / Diseases of Farm Animals. Diseases Caused by Protozoa. R

Abs Jour : Ref Zhur - Biol., No 22, 1958, No 101350

finally, by the recovery of the animals. Administration of vitamin B_{12} during the initial stages of the disease did not prevent the development of anaemia. -- A. D. Musin.

Card 2/2

LEBEDEV, Aleksey Dmitriyevich, kand.khim.nauk; PAYBERDIN, Mikhail Vasil'yevich, dotsent; DANILOVA, V.M., red.; DANILOVA, Ye.M., tekhred.

[Vitamins and their natural resources] Vitaminy i ikh prirodnye resursy. Ioshkar-Ola, Mariiskoe knizhnoe izd-vo, 1959. 104 p. (MIRA 13:6)

1. Povolzhskiy lesotekhnicheskiy institut im. M.Gor'kogo (for Payberdin).

(VITAMINS) (MARI A.S.S.R.--ROSES)

ENGEL'MAN, Iosif Moiseyevich; DANILOVA, V.M., red.; STREL'NIKOV, I.N., tekhn. red.

[This is very important for one's health]Eto ochen' vazhno dlia zdorov'ia. Ioshkar-Ola, Mariiskoe knizhnoe izd-vo, 1962. 153 p. (MIRA 15:10)
(HYGIENE)

DANILOVA, V.M.

Case of pulmonary agenesis. Vest.rent.i rad. 40 no.5:67 S-O '65. (MIRA 18:12)

1. Rentgenovskoye otdeleniye (zav. V.M.Danilova) Novgorodskoy oblastnoy bol'nitsy.

DANILOVA, V. N.

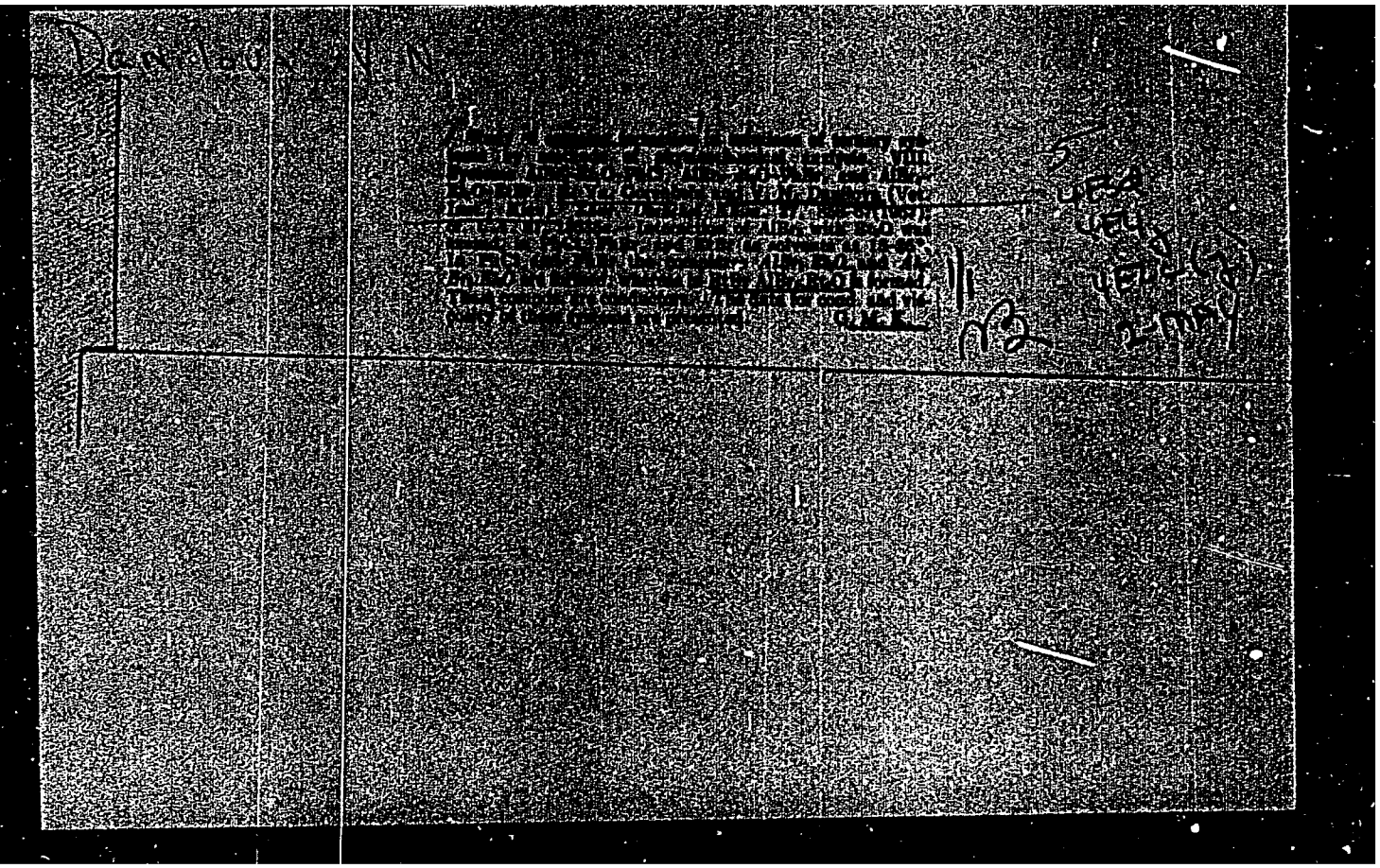
Polarographic determination of tin in metallic copper. I. V. Pyatnitskii and V. N. Danilova. *Ukrain. Khim. Zhur.* 19, 434-8(1953); *Referat. Zhur., Khim.* 1954, No. 31107.—In detg. Sn a slightly modified method of Kovalenko and Lektorskaya was used (cf. *C.A.* 46, 977d). To prevent losses of Sn in dissolving the stannic phosphate on the filter, the filter contg. the ppt. was ashed at as low temp. as possible; the residue was fused with soda, dissolved in HCl, and analyzed polarographically. The polarographic detn. of Sn in Cu is as accurate as the iodometric method but requires appreciably less time and reagents. M. Hosch

DANILOVA, V.N.

PYATNITSKYI, I.V.; DANILOVA, V.N.

Polarographic determination of tin in metallic copper. Ukr. khim.zhur. 19 no.4:434-438 '53. (MLRA 8:2)

1. Kiyevskiy gosudarstvennyy universitet im.T.G.Shevchenko, kafedra analiticheskoy khimii.
(Tin) (Copper) (Polarograph and polarography)



79-28-5 63/69

AUTHORS: Gorenbeyn, Ye. Ya., Danilova, V. N.

TITLE: Investigation of Complex-Formation in Solutions of Ternary Systems by Methods of Physicochemical Analysis (Issledovaniye kompleksoobrazovaniya v rastvorakh troynykh sistem metodami fiziko khimicheskogo analiza). IX. The Systems $AlBr_3$-$(iso\ C_5H_{11})_2O$-C_6H_5Br and $AlBr_3$-$(iso\ C_5H_{11})_2O$-C_6H_5Cl (Sistemy $AlBr_3$-$(iso\ C_5H_{11})_2O$-C_6H_5Br i $AlBr_3$-$(iso\ C_5H_{11})_2O$-C_6H_5Cl)

PERIODICAL: Zhurnal Obshchey Khimii, 1958 Vol. 28, Nr 5 pp. 1387-1392 (USSR)

ABSTRACT: In earlier investigations by the authors it was shown that aluminum bromide with ethyl ether in ethylenebromide, benzene, bromine and chlorbenzene forms two compounds, $AlBr_3 \cdot (C_2H_5)_2O$ and $Al_2Br_6 \cdot (C_2H_5)_2O$ (Reference 1-3). These compounds are good electrolytes for solutions with low dielectric constant. The interesting question was whether aluminum bromide forms a similar compound

Card 1/3

Investigation o Complex-Formation in Solutions of [illegible] 67/69
Ternary Systems by Methods of Physicochemical Analysis

of the same composition with other ethers in how much the nature of the solvent influences the process of complex formation. At the same time there was the second problem of this investigation of the work (Reference 4) that when two monolytes form two or more electrolytes, the investigation of viscosity, as method of physicochemical analysis, shows that compound which best satisfies the current in the given medium. In the present report the results of the investigation [illegible] properties of isoamylether with aluminum bromide in bromo- and chlorobenzene are mentioned. The viscosity and the conductivity of the above-mentioned systems was investigated at 15, 20 and 25°. It was thus found that on certain experimental conditions aluminum bromide with isoamylether in bromobenzene forms two compounds: $AlBr_3 \cdot (C_5H_{11})_2O$ and $Al_2Br_6 \cdot (C_5H_{11})_2O$, however only one in chlorobenzene: $Al_2Br_6 \cdot (C_5H_{11})_2O$

There are 2 figures, 2 tables and 10 references, 9 of which are Soviet.

Card 2/3

Investigation of Complex-Formation in Solutions 79-28-5-63/69
of Ternary Systems by Methods of Physicochemical Analysis

ASSOCIATION: Kiyevskiy veterinarnyy institut (Kiyev, Veterinary Institute)

SUBMITTED: November 6, 1956

Card 3/3

BELOV, I.V.; DANILOVICH, V.N.; SOLONENKO, V.P.; TRESKOV, A.A.; FLORENSOV, N.A.

Professor Mikhail Mikhailovich Odintsov; on his 50th birthday. Geol.i geofiz. no.12:137-138 '61. (MIRA 15:5)
(Odintsov, Mikhail Mikhailovich, 1911-)

BABKO, A.K.; DANILOVA, V.N.

Methods for obtaining analytical uranium concentrates.
Zhur. anal. khim. 18 no.9:1036-1041 S '63. (MIRA 16:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR,
Kiyev.

BABKO, A.K.; DANILOVA, V.N.

Methods for obtaining analytical uranium concentrates.
Zhur. anal. khim. 18 no.9:1036-1041 S '63. (MIRA 16:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR,
Kiyev.

DANILOVA, V.N.

Colorimetric determination of tin with the aid of xylenol orange.
Zav.lab. 29 no.4:407-409 '63. (MIRA 16:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
(Tin--Analysis) (Xylenol orange)

RISKO, A.K.; DANILOVA, V.N.

Concentration and determination of cobalt in metallic nickel.
Zav. lab. 30 no.10:1198-1200 '64. (MIRA 18:4)

1. Institut obshchey i neorganicheskoy khimii AN [illegible].

DANILOVA, V.N.

Determination of cobalt in aqueous solutions of vitamin B_{12}. Ukr. khim. zhur. 30 no.6:651 '64. (MIRA 18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

BABKO, A.K.; DANILOVA, V.N.

Solubility of cobalt thiocyanate diantipyrylmethane and conditions for obtaining analytical concentrates of cobalt. Zhur. anal. khim. 20 no.12:1341-1346 '65.

(MIRA 18:12)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR, Kiyev. Submitted July 7, 1964.

DANILOVA, V.N.; MARCHENKO, P.V.

Xylenol orange as indicator in the determination of bismuth in metallic lead and copper alloys. Zav.lab. 28 no.6:654-656 '62. (MIRA 15:5)

1. Institut obshchey i neorganicheskoy khimii AN USSR.
(Bismuth--Analysis) (Lead--Analysis)
(Copper alloys) (Xylenol orange)

DANILOVA, V.S., kandidat meditsinskikh nauk (Moskva, 6-ya Parkovaya, d.28 kv.11)

Permeability of the peritoneum in peritonitis and chronic diseases of the abdominal viscera. Vest.khir. 77 no.10:80-83 O '56. (MLRA 9:12)

1. Iz kliniki khirurgicheskikh bolezney (zav. - prof. P.L.Sel'tsovskiy) Moskovskogo meditsinskogo stomatologicheskogo instituta na baze bol'nitsy im. Ostroumova.

(PERITONEUM, in various dis.
permeability in peritonetis & chronic dis. of abdom. viscera)
(PERITONITIS, physiol.
permeability of peritoneum in peritonitis & chronic dis. of abdom. viscera)
(ABDOMEN, dis.
chronic dis. of abdom. viscera, peritoneal permeability in)

PAVLOV, V.A.; PONYRKO, S.A.; KHOVANSKIY, Yu.M.; FAFAYEVA, G.I., red.; DANILOVA, V.V., red.

[Stabilization of aircraft and automatic pilots] Stabilizatsiia letatel'nykh apparatov i avtopiloty. Moskva, Vysshaia shkola, 1964. 483 p. (MIRA 17:8)

DANILOVA, V.V.

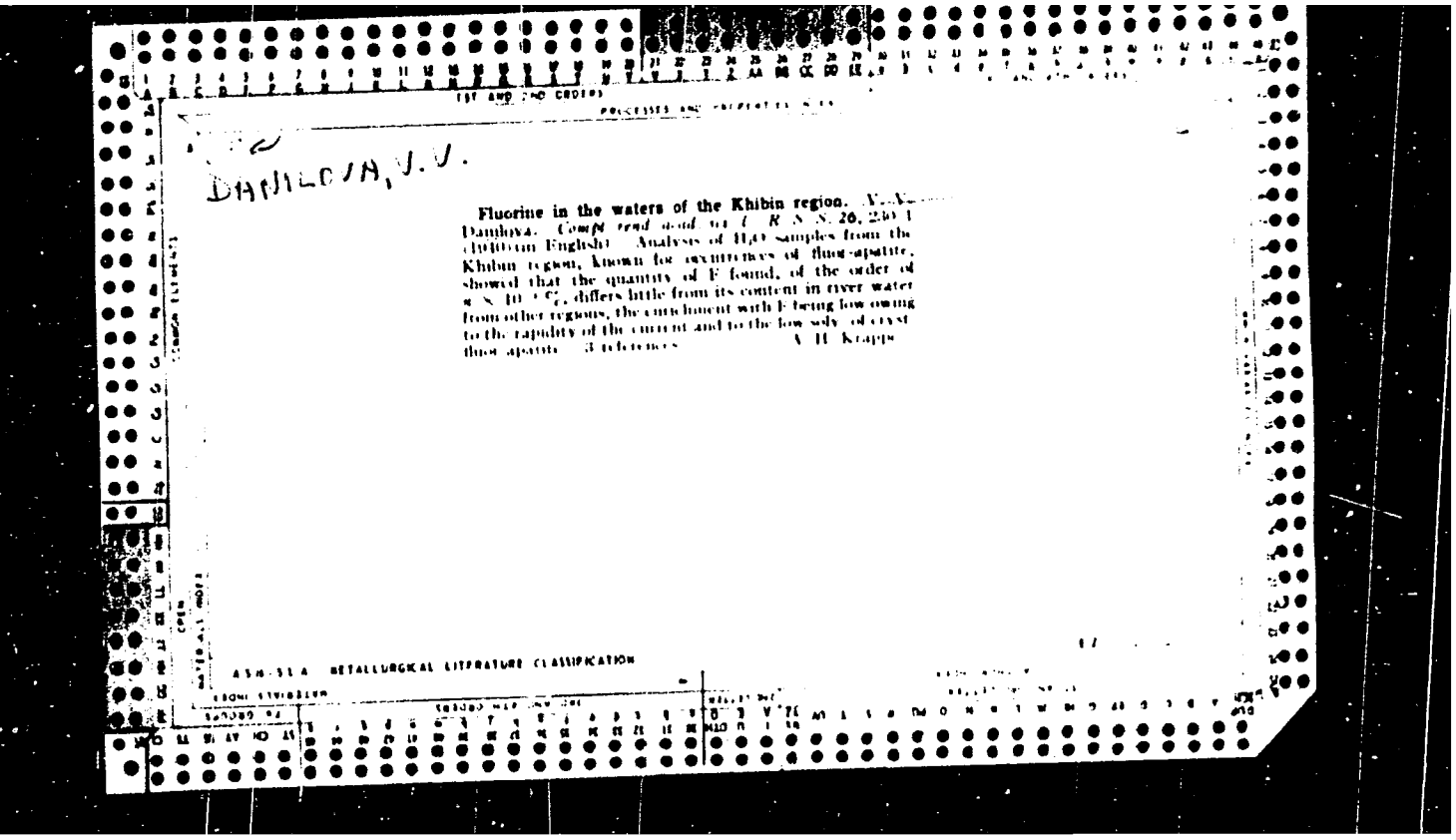
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

118

Fluorine content in the rivers of the Union (in connection with the occurrence of mottled enamel disease). A. P. Vinogradov, V. V. Danilova and L. S. Selivanov. *Compt. rend. acad. sci. U. R. S. S.* 14, 361-4 (1937) (in English).—The F content of various portions of ten large rivers in the Soviet Union does not exceed 0.2 p. p. m. A higher F content was found in waters located in the regions of the Khibiny apatite deposits. H. J. Prebluda

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



DANILOVA, V.V.

Fluorine in the waters of the Khibin region. V. V. Danilova. *Compt. rend. acad. sci. U. R. S. S.* 26, 250-1 (1940) (In English). Analyses of H_2O samples from the Khibin region, known for occurrences of fluor-apatite, showed that the quantity of F found, of the order of $n \times 10^{-4}$ %, differs little from its content in river water from other regions, the enrichment with F being low owing to the rapidity of the current and to the low solv. of fluor-apatite. 3 references. V. H. Krapiva

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

DANILOVA, V.V.

CA

7

The geochemistry of dispersed fluorine. I. Methods for determining small amounts of fluorine V. V. Dani-
lova. *Trav. lab. biogeochim. acad. sci. U. R. S. S.* 7, 69-82
(1944). Mix the sample with $HClO_4$ and glass and det.
the F by the method of Willard and Winter (C. A. 27, 681).
The F is distd. off as H_2SiF_6 and the distillate is ti-
trated in the presence of alizarin-Zr indicator. Various
details concerning interference are discussed. **II. De-
termination of fluorine in plants.** *Ibid.* 83-5. The re-
sults of detg. F in 28 plants are given. Twelve plants
contained about 3.38 × 10⁻⁴% for ground plants and 1.05
× 10⁻⁴% for fresh-water plants. The other plants con-
tained approx. 10⁻⁵% F which is too low to det. accurately.

H. K. Livingston

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA DANILOVA, V.V. 8

Chromium and fluorine in volcanic products. A. A Menyailov, V. V. Danilova, and L. N. Indichenko *Zapiski Vserossiiskogo Mineral Obshchestva* (Mém. soc. russe minéral.) 76, 139-40(1947).—Rocks from the active volcanic centers of N. Kamchatka, especially from Mt. Shiveluchu, were examd. spectroanalytically for Cr. The Cr content (0.0030 0.040%) is lowest in basaltic veins, highest in side craters, intermediate in the central channel It is highest in the amphiboles, low in opal, magnetite, plagioclase, and glass, and entirely absent in gypsum, quartz, and hematite The Cr_2O_3 content of amphibolites is much higher than that in basaltic effusives. The distribution of the Cr of the volcanic rocks in the different parts of the active volcano indicates the participation of volatile Cr compds., and a gaseous transport of the element ("sublimation" in fumarolic vents). The well-known fact that Cr is much enriched in abyssic intrusion rocks is explained by the absence of distn. fractions which might have removed Cr from the magma. F in small contens. was detd. by the method of Willard and Winter (*C. I.* 27, 681), in 28 different volcanic, and a few nonvolcanic rocks of Kamchatka. The basic effusives contain not more than 0.00% F; the siliceous rocks usually have none, in a good agreement with Shepherd (*C.A.* 34, 2735⁹). The chief F-bearing mineral in basaltic effusives is amphibole; dense rocks are higher in F than porous varieties. In intrusive rocks F is also much enriched, namely to 0.035% in acidic, and 0.030% in basic magmas. W. Eitel

DANILOVA, V. V.

5
(3)

(3)

Content of fluorine in rocks. V. V. Danilova. *Trudy Biogeokhim. Lab., Akad. Nauk S.S.S.R.* No. 4, 129-34 (1940).—Numerous F analyses are cited. High F (3.5 × 10^{-1}%) is found in acidic massive cryst. rocks, while the basic forms are low in F (2.85 × 10^{-1}%). In volcanic rocks the basic specimens contain 4 × 10^{-1}% F, while the acidic and neutral ones contain 1.20 × 10^{-1}%. In sedimentary rocks dolomites and limestones contain 2.39 × 10^{-1}%, while gypsum and anhydrites contain 1.33 × 10^{-1}%. Specimens were taken from various regions of U.S.S.R. G. M. K.

EH
9.10.54

(CA 47 no.15: 7388 '53)

B Abs.

DANILOVA, V.V.

2593. Determination of boron and fluorine when present together. D. I. Ryabchikov and V. V. Danilova (*J. anal. Chem. USSR*, 1950, 5, 26—31).—B, in absence of F and oxidising agents, can be determined colorimetrically in conc. H_2SO_4 solution by means of indigo-carmine (0·005% solution in conc. H_2SO_4), the red colour changing to dark blue in presence of B (sensitivity 0·02 mg. of B_2O_3 in 25 ml.). Distillation at 140° of BF_3 from a mixture of borate and F' in H_2SO_4 solution, followed by absorption in 1% NaOH gives a distillate containing all the F and most of the B. The residual B can be determined colorimetrically (as above). B can be quantitatively separated from F by means of a column of the cationite Wofatit R previously washed with HCl (1 : 5) and water. B is absorbed and HF passes through. Washing of the column with 2% HCl and then water yields the B. F can be quantitatively extracted from the first filtrate by means of an anionite (MMG). For determining B and F in minerals, a sample (0·02—0·1 g.) is fused with Na_2CO_3, and the melt extracted with water and then distilled with H_2SO_4 at 140° into 1% NaOH. The B from the distillate is absorbed in Wofatit R, and extracted from the column with HCl, then neutralised with Na_2CO_3, evaporated to dryness, dissolved in H_2SO_4, and determined with indigo-carmine. The F in the first filtrate is determined by the Zr-alizarin method after absorption in an anionite.

G. S. SMITH.

AUTHORS: Danilova, V. V., Alekseyev, M. N. 20-119-5-50/59

TITLE: The Determination of the Relative Geological Age of Fossil Bones According to Their Fluorine Content (Opredeleniye otnositel'nogo geologicheskogo vozrasta iskopayemykh kostey po soderzhaniyu v nikh ftora)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 5, pp. 1020 - 1023 (USSR)

ABSTRACT: The pres[illegible] paper continues the previous investigations (Referenc[illegible] 1). As is well known a recent bone on the whole is a hydroxylapatite which is in a fossil state gradually transformed to fluorine apatite. All bones without exception contain fluorine, but its concentration increases proportional to the geological age. Therefore the age of the bones can be concluded from the fluorine content (References 4,5). Danilova worked out a method for this which is based upon distillation and upon a colorimetric determination of fluorine. Figure 1 shows a device used for this purpose. The necessary reagents are enumerated. The colorimetering is performed by a comparison with a scale. The photocolorimeter does not yield reliable results. The phosphorus content be-

Card 1/4

The Determination of the Relative Geological Age of Fossil Bones According to Their Fluorine Content

all bones of this group belong to the representatives of the Upper Paleolithic complex of fauna. An exception is made by Bison priscus aff. longicornis which belongs to the Khazarskiy complex of the European part of the USSR. b) The second group with numbers from 0,21 to 0,26 corresponds to the remainders from the higher-lying terraces of the Vilyuy river. These bones belong to the Lower Pleistocene. Thus it is evident that the fluorine content in the bones of Quaternary mammals increases from a younger fauna in the direction of an older one. There are several facts which may influence the accumulation of fluorine; among them the freezing of the soil plays the most important part. Regional standard schemes should be set up, so that the necessary corrections for these reasons could be performed. There are 1 figure, 1 table and 6 references, 3 of which are Soviet.

S/081/61/000/022/017/076
B102/B108

AUTHOR: Danilova, V. V.

TITLE: Qualitative determination of boron in rocks and minerals under field conditions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 116, abstract 22D86 (Tr. In-ta geol. rudn. mestorozhd. petrogr., mineralogii i geokhimii. AN SSSR, no. 64, 1961, 98-99)

TEXT: A method of detecting and colorimetrically determining B in ores by means of carmine (I) is described. About 10 mg of powdered rock sample is mixed with Na_2CO_3 at a ratio of 1:3, and is brought into the flame of a spirit lamp in a Pt loop. The pearl is immersed into a test tube with a drop of water. 2-3 drops of H_2SO_4 and 2 ml of sulfuric acid solution of I (0.01 g of I are dissolved in 200 ml of concentrated H_2SO_4) are added. After 3-5 min the solution is colored blue, violet-blue, and rose-lilac in the presence of some ten, hundred, and thousand parts

Card 1/2

Qualitative determination of boron...

per cent of B, respectively. The sensitivity of the reaction is 0.025 mg of B in 25 ml. A semiquantitative determination can be carried out by comparison with a series of standard solutions containing 0-0.08 mg of B. The interfering effect of Mn is eliminated by adding 1-2 $FeSO_4$ crystals.

A content of fluorides higher than that of B in the rock interferes with the determination. [Abstracter's note: Complete translation.]

Card 2/2

BASKAYEV, Kh.K.; GOL'DFARB, M.M.; DANILOVA, V.V., red.

[Diploma project in machinery engineering schools; methodological manual on "Metal cutting"] Diplomnoe proektirovanie v mashinostroitel'nykh tekhnikumakh; uchebno-metodicheskoe posobie dlia spetsial'nosti "Obrabotka metallov rezaniem." n.p. Rosvuzizdat, 1963. 223 p. (MIRA 17:5)

DANILIN, Vasiliy Petrovich; TIKHMENEV, S.S., zasl. deyatel' nauki i tekhniki, doktor tekhn. nauk, retsenzent [deceased]; MAKSIMOV, V.V., dots., retsenzent; ARUTYUNOV, S.S., dots., retsenzent; FRIDLENDER, G.O., prof., nauchn. red.; TITOVA, V.A., red.; DANILOVA, V.V., red.

[Gyroscopic instruments] Giroskopicheskie pribory. Moskva, Vysshaia shkola, 1965. 538 p. (MIRA 18:6)

SVESHNIKOVA, Ye.V.; DANILOVA, V.V.

Role of fluorine and other volatile components in the formation of igneous and alkali rocks as revealed by a study of the nepheline-syenite complex in the trans-Angara region. Geokhimiia no.1:16-24 Ja '65. (MIRA 18:4)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.

SHORYGIN, Andrey Pavlovich; KRAKAU, T.K., dots., retsenzent; GOMOYUNOV, K.A., retsenzent; DANILOVA. V.V., red.

[Magnetic elements of computers] Magnitnye elementy vychislitel'nykh mashin. Moskva, Vysshaia shkola, 1965. 335 p. (MIRA 18:11)

1. Leningradskiy politekhnicheskiy institut im. M.I.Kalinina (for Krakau). 2. Kafedra inzhenernoy elektrofiziki Moskovskogo energeticheskogo instituta im. Molotova (for Gomoyunov).

PREOBRAZHENSKIY, Al[illegible] Alekseyevich, dots., kand. [illegible]n. nauk; BALASHOV, Ye.[illegible]; RAYTSIN, D.G.; LOZDOV, N.[illegible], prof., retsenzent; KIFER, I.I., dots., retsenzent; [illegible]ANILOVA, V.V., red.

[Magnetic materials] Magnitnye materialy. Moskva, Vysshaia shkola, 1965. 234 p. (MIRA 18:10)

1. Moskovskiy institut stali i splavov (for Kifer). 2. Leningradskiy elektrotekhnicheskiy institut imeni Ul'yanova (for Preobrazhenskiy).

DANILOVA, YE. A.

DANILOVA, YE. A. -- "Changes in the Hydrophyllic Colloids of Chestnut-Brown Soils of the Volga Region Following Irrigation." Min Higher Education USSR. Rostov na Donu State U imeni V. M. Molotov. Rostov na Donu, 1955. (Dissertation for the Degree of Candidate of Biological Sciences.)

SO: Knizhnaya letopis', No. 4, Moscow, 1956

MAZURINA, A.F.; DANILOVA, Ye.A., red.; KOVALENKO, V.L., tekhn.red.

[Teaching children to observe nature] Trud i nabliudeniia v prirode. Moskva, Gos.uchebno-pedagog.izd-vo M-va prov.RSFSR, 1960. 240 p. (MIRA 13:6)

1. Metodist Leningradskogo gorodskogo doshkol'nogo metodicheskogo kabineta (for Mazurina).
(Nature study)

DANILOVA, Ye.A., red.; OZARNINA, N.N., red.; NEGRIMOVSKAYA, R.A., tekhn. red.

[Experiments in the improvement of the technology of wool and silk manufacture]Opyt sovershenstvovaniia tekhnologii sherstianogo i shelkovogo proizvodstva; sbornik statei. Moskva, TSentr. biuro tekhn. informatsii, 1962. 55 p. (MIRA 16:4)

1. Moscow(Province)Oblastnoy sovet narodnogo khozyaystva. (Textile research)

DANILOVA, Yevgeniya Feodos'yevna,; KAPUSTINA, V.S., red.; SHCHEPTEVA, T.A., tekhn. red.

[How to help pupils find solutions to geometry problems] Kak pomoch' uchashchimsia nakhodit' put' k resheniiu geometricheskikh zadach. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1958. 95 p. (MIRA 11:10)

(Geometry--Problems, exercises, etc.)

DANILOVA, Ye.F.

Vladimir Modestovich Bradis; on his 70th birthday. Mat. v shkole no.3:83-85 My-Je '61. (MIRA 14:5)
(Bradis, Vladimir Modestovich, 1891-)

DANILOVA, Yevgeniya Feodos'yevna; DOLGOPOLOV, V.G., red.;
DRANNIKOVA, M.S., tekhn. red.

[How to help students find a way to solve geometrical problems]Kak pomoch' uchashchimsia nakhodit' put' k resheniiu geometricheskikh zadach. 2. ispr. i dop. izd. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1961. 141 p.
(MIRA 15:2)

(Geometry—Problems, exercises, etc.)

137-1958-2-2341

DANILOVA, YE. I.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 19 (USSR)

AUTHORS: Frents, G.S., Danilova, Ye.I., Kuvinov, V.Ye.

TITLE: On the Formation of Sulfates During the Oxidation of Zinc Sulfide (K voprosu sul'fatoobrazovaniya pri okislenii sul'fida tsinka)

PERIODICAL: Tr. In-ta metallurgii, AN SSSR, 1957, Nr 2, pp 42-46

ABSTRACT: The purpose of this study was to show that the chemistry of the oxidation of ZnS is similar to that of the oxidation of other heavy metals and that it passes through an intermediate stage of sulfate formation. Because of their limited thermal stability, Zn sulfates quickly decompose at the temperatures of intense oxidation of ZnS. When a sulfate of Na was used as a fixing agent and higher oxygen pressures were used during the oxidation of ZnS, large quantities of sulfates, an intermediate product of oxidation of the ZnS, were found in the reaction products.

G.F.

1. Zinc sulfides--Oxidation 2. Sulfates--Formation

Card 1/1

FRENTS, G.S.; DANILOVA, Ye.I.

Interaction of sulfur dioxide with the oxides ans sulfides of certain nonferrous metals. Trudy Inst.met. no.5:76-80 '60. (MIRA 13:6)

(Sulfides--Metallurgy)
(Sulfur dioxide)
(Nonferrous metals--Metallurgy)

GREYSBURG, D.L.; DANILOVA, E.I.; SEREZIDINOVA, Z.L.

Manufacture of gas-concrete wall panels by vertical casting in cassettes. Stroi. mat. 11 no. 12:6-7 D '65. (MIRA 18:12)

1. Glavnyy inzhener Novosibirskogo gazobetonnogo zavoda No.2 (for Greysburg). 2. Nachal'nik laboratorii Novosibirskogo gazobetonnogo zavoda No. 2 (for Danilova). 3. Nachal'nik tekhnicheskogo otdela Novosibirskogo gazobetonnogo zavoda No. 2 (for Serezidinova).

DANILOVA, Ye. I. [Danilova, IE. I.]; SVISTUN, V.I. [Svystun, V.I.]

Discovery of fossil human bones in allyvial deposits near the Dneprodzerzhinsk Hydroelectric Power Station. Dop.AN URSR no.5:669-673 '61. (MIRA 14:6)

1. Institut zoologii AN USSR. Predstavleno akademikom AN USSR V. G. Kas'yanenko [Kas'ianenko, V.H.].
(Romankovo (Dnepropetrovsk Province)—Man, Prehistoric)

DANYLOVA, Ye.I.; KAS'YANENKO, V.H., diysnyy chlen.

Data on the principles of morphogenesis and function in the stiff joints of the extremities in mammals. Dop.AN URSR no.5:401-404 '52. (MLRA 6:10)

1. Akademiya nauk Ukrayins'koyi RSR (for Kas'yanenko). 2. Instytut zoolcgiyi Akademiyi nauk Ukrayins'koyi RSR (for Danylova). (Joints)

DANILOVA, Ye. I.

Functional evaluation of the metatarsus and metacarpus in some representatives of plantigrade and digitigrade mammals. Trudy Inst. zool. AN URSR no.9:120-130 '52. (MLRA 8:11)
(Joints) (Mammals--Anatomy)

DANILOVA, Ye. I.

Methodology of comparative anatomy studies of joint surface contours. Trudy Inst. zool. AN URSR 11:79-83 '54. (MIRA 8:2)
(Anatomy, Comparative)(Joints)

DANILOVA, Ye. I.

Effect of the shift in weight on the development of joints of the extremities. Trudy Inst. zool. AN URSR 11:84-94 '54. (MLRA 8:2)
(Joints)

DANILOVA, Ye.I.

Comparative anatomy of some peculiar features in the evolution of the human metacarpus and hand muscles. Dokl.AN SSSR 111 no.4:907-910 D '56. (MLRA 10:2)

1. Institut zoologii Akademii nauk USSR. Predstavleno akademikom A.V.Palladinym.

(HAND)

30(2)
AUTHOR: Danilova, Ye.I. SOV/21-59-3-24/27

TITLE: On the Initial Form of the Primate Paw and the Survival in the Human Hand of Certain Primitive Characteristics (Ob iskhodnoy forme kisti primatov i o sokhranenii v ruke cheloveka nekotorykh primitivnykh priznakov)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 3, pp 331-334 (USSR)

ABSTRACT: Using her own works [Ref 5-8], the author disproves the contentions of some authors [Ref 1-3] that the human hand is primitive. With respect to its morphology and function, the human hand possesses features of peculiar specializations, which secure a high degree of multifunctionality. Only certain features of the human hand (the relative reduction of the second finger as compared to the fourth finger) provide evidence of the phylogenetic affinity of all primates.

Card 1/2

On the Initial Form of the Primate Paw and the Survival in the Human Hand of Certain Primitive Characteristics

SOV/21-59-3-24/27

There are 3 photos, 2 tables and 10 references, 7 of which are Soviet, 2 German and 1 English.

ASSOCIATION: Institut zoologii AN UkrSSR (Institute of Zoology of the AS UkrSSR)

PRESENTED: November 22, 1958, by V.G. Kas'yanenko, Member of the AS UkrSSR

Card 2/2

DANILOVA, Ye.I.

An attempt to reconstruct the foot of Mongolotherium plantigradum Flerow by its skeletal remains. Zool.zhur. 38 no.7:1069-1080 Jl '59. (MIRA 12:10)

1. Department of Comparative Morphology, Institut of Zoology, Academy of Sciences of Ukrainian S.S.R. (Kiev).
(Dinocerata) (Foot)

DANILOVA, Ye.I. (Kiyev, Malaya Zhitomirskaya ul., 16, kv. 4)

Data on the evolution of the human hand. Arkh. anat. gist. emtr. 39 no. 10:99-107 O '60. (MIRA 14:2)

1. Otdel sravnitel'noy morfologii (zav. deystvitel'nyy chlen AN USSR prof. V.G. Kasayenenko) Instituta zoologii AN USSR. (HAND) (EVOLUTION)

DANILOVA, Ye. I.

"Morfologicheskiye osobeniosti kisti drevnikh gominid v svyazi s nekotorymi voprosami antropogeneza."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences, Moscow, 3-10 Aug 64.

DANILOVA, Ye.M.

ZHURAVLEVA, L.Ye.; DANILOVA, Ye.M. (Leningrad)

Underground gasification of coal. Khim. v shkole 13 no.1:3-5 Ja-F '58. (MIRA 10:12)
(Underground coal gasification)

DANILOVA, Ye.M.; PEREKALIN, V.V.

Synthesis and transformations of aminoethyl derivatives of cyclic β-diketones. Zhur. org. khim. 1 no.9:1708 S '65.
(MIRA 18:12)

1. Leningradskiy pedagogicheskiy institut imeni A.I. Gertsena.
Submitted May 12, 1965.

DANILOVA, Ye. N.

DANILOVA, Ye. N. -- "Speeding up the Process of Preparing Rye Dough," Cand. S. Agr. Sc., Moscow Technological Inst of Food Industry (Dissertation for the Degree of Candidate in Technical Science

SO: Vechernaya Moskva, January-December 1952